AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (Currently Amended) A method for recording ~~and~~ or reproducing a data ~~into and~~ or from an optical recording medium, comprising the steps of:

reading, in a zigzag direction, blocks of data having a predetermined size of byte units arranged in a pre-set number of rows and columns ~~in an optical recording medium in a zigzag direction,~~ the blocks including a main data part and an error correction code (ECC) part, the main data part including a data ID part, wherein the blocks are modulated by a predetermined modulation method; ~~and~~

rearranging the ~~read~~ blocks read in the zigzag direction; and

recording the rearranged data on ~~in~~ the optical recording medium;~~

reading the data recorded in the optical recording medium; and

reproducing the read data.~~

2. (Original) The method of claim 1, wherein, in the rearranging step, columns and rows of the blocks are scanned zigzag in a diagonal direction and the resulting blocks are rearranged in a row.

3. (Currently Amended) The method of claim 1, wherein the data to be recorded contains a synchronous signal ~~and a modulated data~~.

4. (Currently Amended) The method of claim ~~3~~ 1, wherein the modulated data is formed by an EFM plus modulation method, wherein 8-bit data is modulated to 16-bit data.

5. (Currently Amended) The method of claim ~~3~~ 4, wherein the modulated data contains ~~a~~ scrambled main data and data ID ~~and an error correction code~~.

6. (Currently Amended) The method of claim ~~5~~ 3, wherein the ~~scrambled data contains a user data and information on a collection of data blocks~~synchronous signal is not read in the zigzag direction.

7. (Currently Amended) An apparatus for recording ~~and~~ or reproducing data ~~into~~ ~~and~~ or from an optical recording medium using a zigzag scan, comprising:

a data processor generating ~~a~~ data blocks to be recorded on ~~in~~ an optical recording medium from ~~a~~ user data, the data blocks having a predetermined size of byte units arranged in a pre-set number of rows and columns, the data blocks including a main data part and an error correction code (ECC) part, the main data part including a data ID part, wherein the data blocks are modulated by a predetermined modulation method, ~~and~~

~~reproducing the user data from a data read from the optical recording medium~~;

a rearranging unit generating rearranged data from the data outputted from the data processor by scanning the data blocks in a zigzag direction~~, and generating a data before the data rearrangement from the rearranged data~~; and

a recording ~~and reproducing~~ unit recording the rearranged data outputted from the rearranging unit on ~~in~~ the optical recording medium~~, and reproducing the data recorded in the optical recording medium to output it to the rearranging unit~~.

8. (Currently Amended) The apparatus of claim 7, wherein the data processor comprises:

a scramble and ECC adding unit for scrambling the ~~user~~ main data part, inserting ~~an error correction code~~ the ECC part and generating ~~a first data sector~~ the data blocks;

a modulator for modulating the ~~first sector~~ data blocks; and

a synchronous signal inserting unit for inserting a synchronous signal into the modulated data and generating the data blocks to be recorded on ~~in~~ the optical recording medium.

9. (Cancel)

10. (Currently Amended) The apparatus of claim 7, wherein, ~~in~~ the rearranging unit <u>scans the,</u> ~~the~~ data outputted from the data processor ~~is scanned~~ zigzag in a diagonal direction.

11. (Currently Amended) A method for recording ~~a~~ data ~~into~~ an optical recording medium in which ~~a~~ data to be recorded <u>on</u> ~~in~~ an optical recording medium <u>includes a plurality of data blocks, the data blocks having a predetermined size of byte units arranged in a pre-set number of rows and columns, the data blocks including a main data part and an error correction code (ECC) part, the main data part including a data ID part, wherein the data blocks</u> ~~is~~ <u>are</u> modulated <u>by a predetermined modulation method</u> and ~~a~~ synchronous ~~signal~~ <u>data</u> is inserted into the modulated data<u> blocks,</u> comprising the steps of:

scanning ~~a~~ <u>the</u> data <u>blocks in a</u> zigzag <u>direction</u> so that the data <u>blocks</u> ~~with the synchronous inserted into~~ can be dispersed in a track traverse direction of the optical recording medium; and

recording the zigzag-scanned data <u>and the synchronous data on</u> ~~in~~ the optical recording medium.

12. (Cancel)

13. (Currently Amended) The method of claim 11, wherein <u>in the recording step,</u> the zigzag-scanned data ~~scanning~~ is sequentially recorded <u>on</u> ~~in~~ the

optical recording medium.

14. (Currently Amended) A method for ~~An optical recording medium data~~ reproducing ~~method in which a~~ data from an optical recording medium, the data including a plurality of data blocks having a predetermined size of byte units arranged in a pre-set number of rows and columns, the data blocks including a main data part and an error correction code (ECC) part, the main data part including a data ID part, wherein the data as recorded on the optical recording medium is arranged as a result of zigzag scanning the data blocks, and is ~~recorded to be~~ distributed in a traverse direction of a track in the ~~an~~ optical recording medium ~~and scanned zigzag, and the recorded data is reproduced~~, comprising the steps of:

reading the ~~a~~ data recorded on ~~in~~ the optical recording medium;

arranging the read data in the reverse order of the zigzag scanning; and

~~reading~~ processing the reversely arranged data.

15. (Cancel)

16. (Cancel)

17. (Currently Amended) An apparatus for ~~optical recording medium data~~ reproducing data from an optical recording medium, the data including a

plurality of data blocks having a predetermined size of byte units arranged in a pre-set number of rows and columns, the data blocks including a main data part and an error correction code (ECC) part, the main data part including a data ID part, ~~using a zigzag scan in which a~~ wherein the data as recorded on the optical recording medium is arranged as a result of zigzag scanning the data blocks and ~~as being scanned zigzag so that a data to be recorded in an~~ ~~optical recording medium~~ is dispersed in a traverse direction of a track in the optical recording medium ~~is reproduced~~, comprising:

a reproducing unit reading the ~~a~~ data recorded on ~~in~~ the optical recording medium; and

a scan unit scanning the data read from the reproducing unit in the reverse order of the zigzag scanning.

18. (New) The method of claim 14, wherein the arranging step includes scanning the read data in the reverse order of the zigzag scanning.

19. (New) The method of claim 18, wherein the processing step includes demodulating and descrambling the reversely arranged data.

20. (New) The apparatus of claim 17, further comprising:

a synchronous signal detector detecting a signal output from the scan unit;

a demodulator demodulating a signal output from the synchronous

signal detector; and

a descrambler descrambling a signal output from the demodulator.